

Bay Species

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The 1995 abundance indices of several species that rear in brackish water (salinity less than 15 ppt) increased to the highest levels in the past 9 to 12 years. Abundance of immature bay shrimp (*Crangon franciscorum*) was the highest since 1986 (Figure 1); abundance of young-of-the-year starry flounder was the highest since 1983 (Figure 2). In 1995, distribution of both species was centered in San Pablo Bay and lower Suisun Bay. (See page 28 for a discussion of longfin smelt, which also rear in brackish water.)

In contrast, abundance of several species that rear in intermediate to marine salinity (about 15-30 ppt) did not increase significantly in 1995. Although the 1995 Pacific herring young-of-the-year abundance index (Figure 3) was greater than indices from the last half of the drought (1990-1992), it was well below indices from several other high outflow years (1980, 1982, 1986). We have hypothesized that in 1995, similar to 1983, a large number of Pacific herring larvae were carried from the bay by outflow. The relative strength of the 1995 year class can be better evaluated when the 2- and 3-year-old fish return to the bay. Abundance of C+ Dungeness crab was, as expected, very low in 1995 (Figure 4). Factors controlling the in-bay abundance of Dungeness crab were discussed in the Autumn 1995 *Newsletter*. Shiner perch young-of-the-year abundance indices have been at relatively low levels since 1988 (Figure 5).

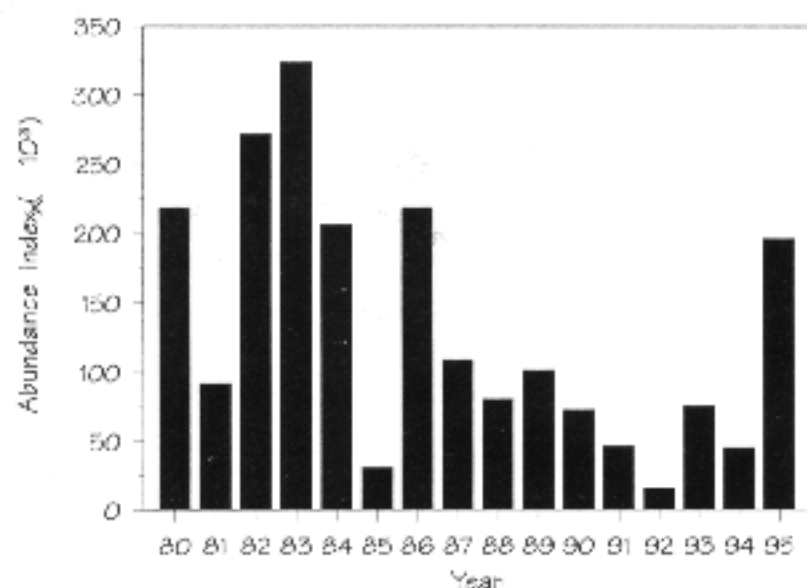


Figure 1

Annual Abundance of Immature Bay Shrimp (*Crangon franciscorum*), Otter Trawl, 1980-1995
Index period is May-October.

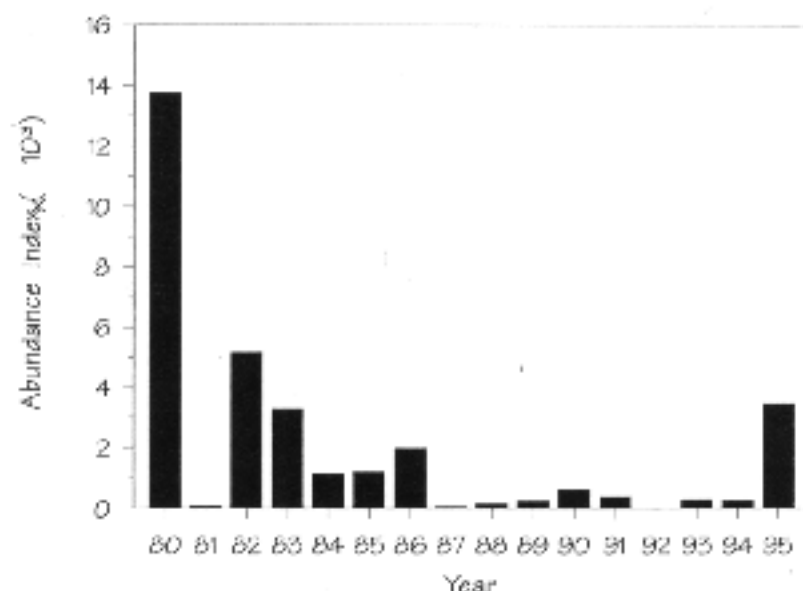


Figure 2

Annual Abundance of Young-of-the-Year Starry Flounder, Otter Trawl, 1980-1995
Index period is May-October.

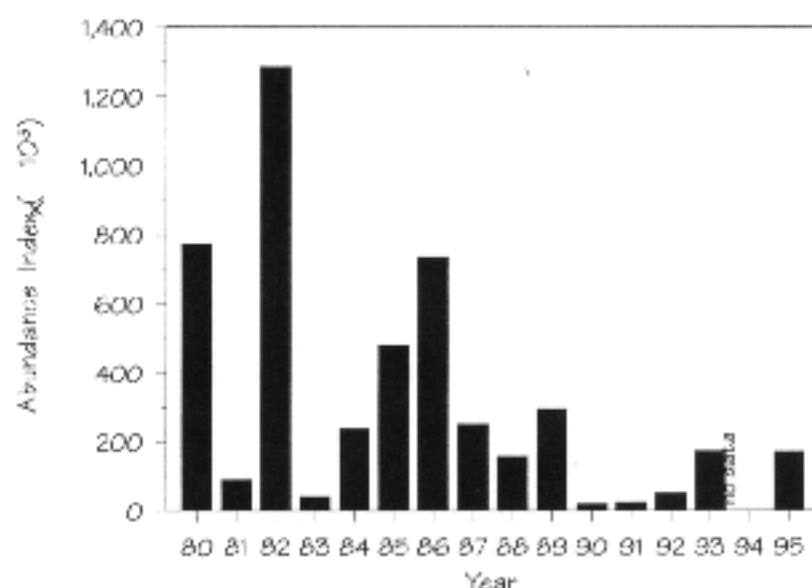


Figure 3

Annual Abundance of Young-of-the-Year Pacific Herring, Midwater Trawl, 1980-1995
Index period is April-September. No sampling in 1994.